Statement of Basis of the Federal Operating Permit

Sekisui Specialty Chemicals America, LLC

Site/Area Name: Sekisui Specialty Chemicals America Pasadena Plant Physical location: 1423 Pasadena Fwy Nearest City: Pasadena County: Harris

> Permit Number: O2308 Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869 SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements;

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status; and

A list of available unit attribute forms.

Prepared on: June 23, 2014

Operating Permit Basis of Determination

Permit Area Process Description

Conversion of vinyl acetate to polyvinyl acetate is accomplished in a polymerization train via solution polymerization of vinyl acetate in methanol using a thermally activated initiator. Un-reacted vinyl acetate is removed from the polyvinyl acetate/methanol ("paste") solution in a stripping column using methanol vapor. The stripped "paste" solution is sent to six 75,000 gallon fixed roof "paste" storage tanks which vent directly to a boiler. The boiler is included in Air Product's permit number O-01675. A portion of the un-reacted vinyl acetate is recycled directly to the polymerization section while the remainder is recovered in the vinyl acetate recovery section, in which a series of three distillation columns are used to separate the vinyl acetate from the methyl acetate, methanol and other materials.

The "paste" solution is reacted in the presence of a catalyst in two saponification reactors to yield polyvinyl alcohol gel and by-product methyl acetate. The PVOH gel is processed to yield a slurry of solid PVOH particles in methanol/methyl acetate, which is filtered and dried in a convective drying system using superheated solvent vapor. The filtrate, a mixture of methyl acetate/methanol, is collected and pumped to two 200,000-gallon floating roof mother liquor (ML) storage tanks for further processing.

Dried PVOH is ground and screened to final particle size in the finishing area. Final product is stored in three 12,000 cu. ft. silos prior to loading and shipping.

The ML solution from the saponification section is processed into recovered methanol and glacial acetic acid in the acetic acid recovery section. Recovered methanol is stored in one 200,000 gallon and one 59,000 gallon internal floating roof storage tanks. Conversion of methyl acetate to acetic acid and methanol is accomplished in a liquid phase reactor in the presence of an excess of water. Glacial acetic acid is recovered in a series of two distillation columns as a vapor product from the process and stored as a liquid in one 250,000 gallon and one 50,000 gallon fixed roof storage tanks.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

-		
Major Pollutants	VOC, HAPS	

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - o Protection of Stratosphere Ozone
 - o Permit Location
 - o Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - o Permit Shield
 - New Source Review Authorization References
 - o Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception-Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- 1. Office activities such as photocopying, blueprint copying, and photographic processes.
- 2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
- 3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- 4. Outdoor barbecue pits, campfires, and fireplaces.
- 5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- 6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- 7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.

- 8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 9. Vehicle exhaust from maintenance or repair shops.
- 10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- 11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- 12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- 13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 15. Well cellars.
- 16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- 17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
- 18. Equipment used exclusively for the melting or application of wax.
- 19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 20. Shell core and shell mold manufacturing machines.
- 21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
- 22. Equipment used for inspection of metal products.
- 23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
- 25. Battery recharging areas.
- 26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at

www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
900-10.10	30 TAC Chapter	R5112-01	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons
900-10.10	40 CFR Part 63, Subpart FFFF	634F-10.10	Emission Standard = HAP vapor pressure is < 76.6 and the unit is complying with 40 CFR Part 63, subpart WW per § 63.2470(a)-Table 4.1.b.i.
			WW Tank Control = An internal floating roof is operated and maintained per 40 CFR § 63.1062(a)(1).
			Notification = The referencing subpart requires notification of initial startup.
			Unslotted Guide Pole = The tank does not use an unslotted guide pole.
			Wiper or Seal = The unslotted guide pole is equipped with a pole wiper and a pole sleeve.
			Seal Configuration = Vapor-mounted seal.
900-10.30	30 TAC Chapter 115, Storage of	R5112-01	Today's Date = Today's date is March 1, 2013 or later.
	VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.30	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
900-10.31	30 TAC Chapter	5, Storage of	Today's Date = Today's date is March 1, 2013 or later.
	VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.31	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).

Unit ID	Regulation	Index Number	Basis of Determination*
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
900-10.40	30 TAC Chapter	R5112-01	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.40	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the floating roof
			NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
900-10.50	30 TAC Chapter 115, Storage of VOCs	5, Storage of	Today's Date = Today's date is March 1, 2013 or later.
			Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.50	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
900-10.60	30 TAC Chapter	R5112-01	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs	, Storage of Alternate Control Requirement	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.60	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the floating roof
			NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
900-10.70	30 TAC Chapter	R5112-01	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.70	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the floating roof
			NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
900-10.80	30 TAC Chapter	R5111-01	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs	Alternate Control Requirement = Not using	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
		True Vapor Pressure = True	True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.80	30 TAC Chapter	R5111-02	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs	5, Storage of	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
900-10.80	40 CFR Part 60, Subpart Kb	60KB-01	Product Stored = Volatile organic liquid

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)
			Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia
			Storage Vessel Description = Emission controls not required (fixed roof)
900-60.01	40 CFR Part 60,	60KB-01	Product Stored = Volatile organic liquid
	Subpart Kb		Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)
			Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
GRP-MLTKS	30 TAC Chapter	R5112-01	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
GRP-MLTKS	40 CFR Part 63, Subpart G	63G-01	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
			NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Internal floating roof
GRP-PTKS	30 TAC Chapter	R5112-01	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using a vapor recovery system (VRS)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
			Control Device Type = Other vapor destruction unit
GRP-PTKS	30 TAC Chapter	R5112-02	Today's Date = Today's date is March 1, 2013 or later.
	115, Storage of VOCs		Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Tank Description = Tank using a vapor recovery system (VRS)
			True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
			Control Device Type = Flare
GRP-PTKS	40 CFR Part 63, Subpart FFFF	634F-GRPPTKS- 01	Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested.

Unit ID	Regulation	Index Number	Basis of Determination*
			Determined HAL = The emission stream is determined not to be halogenated.
			Emission Standard = HAP vapor pressure is greater than or equal to 76.6 and a non-flare CD is being used to meet 95% reduction per § 63.2470(a)-Table 4.1.a.i.
			CEMS = A continuous parameter monitoring system is used.
			HAL Device Type = No halogen scrubber or other halogen reduction device is used.
			Prior Test = The data from a prior performance test is used.
			SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel.
			Meets 63.998(b)(2) = The control device meets criteria in § 63.985(b)(2).
			Designated HAL = The emission stream is not designated as halogenated.
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			Bypass Line = The closed vent system does not contain a bypass line that could divert the vent stream away from the control device.
GRP-PTKS	40 CFR Part 63,	634F-GRPPTKS-	Designated HAL = The emission stream is not designated as halogenated.
	Subpart FFFF	02	Emission Standard = HAP vapor pressure is greater than or equal to 76.6 and a flare is being used for control per 🗆 63.2470(a)- Table 4.1.a.ii.
			Determined HAL = The emission stream is determined not to be halogenated.
			Prior Eval = The data from a prior evaluation or assessment is used.
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			Bypass Line = The closed vent system does not contain a bypass line that could divert the vent stream away from the control device.
900-HAC	30 TAC Chapter 115, Loading and Unloading of VOC	R5212-01	Chapter 115 Control Device Type = No control device.
			Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Loading and unloading.
		True Vapor Pressu	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor balance system.
900-MEAC	30 TAC Chapter 115, Loading and Unloading of VOC	R5212-01	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system.
			Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Loading and unloading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.

Unit ID	Regulation	Index Number	Basis of Determination*
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.
900-MEAC	30 TAC Chapter	R5212-02	Chapter 115 Control Device Type = Vapor control system with a flare.
	115, Loading and Unloading of VOC		Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Loading and unloading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.
900-MEAC	40 CFR Part 63, Subpart G	63G-01	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b).
			Control Device = Boiler or process heater.
			Halogenated Emissions = There are no halogenated emission streams from the transfer rack.
			Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).
			Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.
			Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).
			Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.
			Performance Test Exemption = The design heat input capacity of the boiler or process heater is greater than or equal to 44 MW.
			Title 40 § 63.128(h) Option = The transfer rack is complying with 40 CFR § 63.128(a) or (b).
			Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system or is subject to § 63.148 of Subpart G.
			Shared Control Device = The control device is shared between transfer racks and process vents.
			Hard Piping = The closed vent system is constructed of hard piping.
			Multiple Arms = Control device is shared between multiple arms loading simultaneously.
900-MEAC	40 CFR Part 63,	63G-02	Control Device = Flare.
	Subpart G		Halogenated Emissions = There are no halogenated emission streams from the transfer rack.
			Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).
			Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.
			Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).
			Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.
			Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system or is subject to § 63.148 of Subpart G.
			Hard Piping = The closed vent system is constructed of hard piping.
900-MEOH	30 TAC Chapter	R5212-01	Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or

Unit ID	Regulation	Index Number	Basis of Determination*
	115, Loading and		carbon adsorption system.
	Unloading of VOC		Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Loading and unloading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.
900-MEOH	30 TAC Chapter	R5212-02	Chapter 115 Control Device Type = Vapor control system with a flare.
	115, Loading and Unloading of VOC		Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Loading and unloading.
			True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor control system that maintains a control efficiency of at least 90%.
900-MEOH	40 CFR Part 63, Subpart G	63G-01	Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b).
			Control Device = Boiler or process heater.
			Halogenated Emissions = There are no halogenated emission streams from the transfer rack.
			Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).
			Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.
			Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).
			Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.
			Performance Test Exemption = The design heat input capacity of the boiler or process heater is greater than or equal to 44 MW.
			Title 40 § 63.128(h) Option = The transfer rack is complying with 40 CFR § 63.128(a) or (b).
			Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system or is subject to § 63.148 of Subpart G.
			Shared Control Device = The control device is shared between transfer racks and process vents.
			Hard Piping = The closed vent system is constructed of hard piping.
			Multiple Arms = Control device is shared between multiple arms loading simultaneously.
900-MEOH	40 CFR Part 63,	63G-02	Control Device = Flare.
-	Subpart G		Halogenated Emissions = There are no halogenated emission streams from the transfer rack.

Unit ID	Regulation	Index Number	Basis of Determination*
			Transfer Rack Type = Group 1 transfer rack (as defined in 40 CFR § 63.111).
			Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.
			Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).
			Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.
			Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system or is subject to § 63.148 of Subpart G.
			Hard Piping = The closed vent system is constructed of hard piping.
REGVLOAD	30 TAC Chapter 115, Loading and	R5211-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
	Unloading of VOC		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only loading.
			True Vapor Pressure = True vapor pressure less than 0.5 psia.
REGVLOAD	30 TAC Chapter 115, Loading and	R5211-02	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
	Unloading of VOC		Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only unloading.
			True Vapor Pressure = True vapor pressure less than 0.5 psia.
REGVLOAD	30 TAC Chapter	R5211-03	Chapter 115 Control Device Type = No control device.
	115, Loading and Unloading of VOC		Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.
			Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.
			Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.
			Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.
			Transfer Type = Only unloading.
		True V	True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.
			Daily Throughput = Daily throughput not determined since 30 TAC § 115.217(a)(2)(A) or 30 TAC § 115.217(b)(3)(A) exemption is not utilized.
			Control Options = Vapor balance system.
REGVLOAD		634F-REGVLD-01	Emission Standard = A non-flare CD is being used to meet 98% reduction per § 63.2475(a) - Table 5.1.a.
	Subpart FFFF		Meets 63.988(b)(2) = The control device meets criteria in § 63.985(b)(2).
			Small Device = A small control device (defined in § 63.2550) is not being used.
			Designated Hal = The emission stream is not designated as halogenated.
			Primary Fuel = All vent streams are introduced with the primary fuel or are used as primary fuel.
			44 Primary = The boiler or process heater is either 44 megawatts or greater or the vent stream is introduced as or with primary fuel.
			Determined Hal = The emission stream is determined to be nonhalogenated.
			Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been

Unit ID	Regulation	Index Number	Basis of Determination*
			requested.
			Prior Eval = The data from a prior evaluation or assessment is used.
			CEMS = Continuous parameter monitoring is used.
			Hal Device Type = No halogen scrubber or other halogen reduction device is used
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			SS Device Type = Boiler.
			Bypass Line = The CVS does not contain any bypass line that could divert the vent stream away from the control device.
REGVLOAD	40 CFR Part 63,	634F-REGVLD-	Emission Standard = A flare is being used per § 63.2475(a) - Table 5.1.b.
	Subpart FFFF	02	Designated Hal = The emission stream is not designated as halogenated.
			Determined Hal = The emission stream is determined to be nonhalogenated.
			Prior Eval = The data from a prior evaluation or assessment is used.
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			Bypass Line = The CVS does not contain any bypass line that could divert the vent stream away from the control device.
900-FLARE	30 TAC Chapter	R1111-01	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
	111, Visible Emissions		EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used under conditions other than emergency or upset conditions.
900-FLARE	40 CFR Part 60,	60A-01	SUBJECT TO 40 CFR 60.18 = Flare is subject to 40 CFR § 60.18.
	Subpart A		ADHERING TO HEAT CONTENT SPECIFICATIONS = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).
			FLARE ASSIST TYPE [NSPS A, NESHAP A, AND/OR MACT A] = Non-assisted
			FLARE EXIT VELOCITY [NSPS A, NESHAP A, AND/OR MACT A] = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
900-FLARE	40 CFR Part 63,	63A-01	REQUIRED UNDER 40 CFR 63 = Flare is required by a Subpart under 40 CFR Part 63.
	Subpart A		HEAT CONTENT SPECIFICATION = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8).
			FLARE ASSIST TYPE = Non-assisted
			FLARE EXIT VELOCITY = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
900-HFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
900-HFUG	40 CFR Part 63, Subpart H	63H-ALL	SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device.
			ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
			BYPASS LINES = FUGITIVE UNIT WITH A CLOSED-VENT SYSTEM DOES NOT CONTAIN A BY-PASS LINE THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE
			RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
			UNSAFE TO INSPECT = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO PARTS DESIGNATED AS UNSAFE TO INSPECT
			DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT

Unit ID	Regulation	Index Number	Basis of Determination*
			EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS
			ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
			FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
900-PFUG	40 CFR Part 63, Subpart FFFF	63PFUG-FFFF	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.
900-D78.01	30 TAC Chapter	R5121-01	Alternate Control Requirement = Alternate control is not used.
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
			Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
900-D78.01	30 TAC Chapter		Alternate Control Requirement = Alternate control is not used.
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.
			40 CFR 60 Subpart NNN Requirements = The distillation unit vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart NNN: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
			Control Device Type = Smokeless flare
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
			40 CFR 60 Subpart RRR Requirements = The reactor process vent gas stream satisfies neither of the following requirements of 40 CFR Part 60, Subpart RRR: TRE index value is greater than 8.0; or TRE index value is greater than 1.0 without the use of VOC emission control devices.
900-D78.01	40 CFR Part 63,	634F-D78.01-01	Designated Grp1 = The emission stream is designated as Group 1.
	Subpart FFFF	part FFFF	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i.
			Hal Device Type = No halogen scrubber or other halogen reduction device is used.
			Meets $63.988(b)(2)$ = The control device meets criteria in § $63.985(b)(2)$.

Unit ID	Regulation	Index Number	Basis of Determination*
			Small Device = A small control device (defined in § 63.2550) is not being used.
			1257A1 = No design evaluation as specified in § 63.1257(a)(1) is being conducted.
			Designated Hal = The emission stream is not designated as halogenated.
			Prior Eval = The data from a prior evaluation or assessment is used.
			Determined Hal = The emission stream is determined to be non-halogenated.
			Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested.
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			Bypass Line = The closed vent system contains no bypass line.
			CEMS = A CEMS is not used.
			SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel.
900-D78.01 40 CFR Part 63,	40 CFR Part 63,	Part 63, 634F-D78.01-02	Designated Grp1 = The emission stream is designated as Group 1.
	Subpart FFFF		Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control.
			Designated Hal = The emission stream is not designated as halogenated.
			Determined Hal = The emission stream is determined to be non-halogenated.
			Prior Eval = The data from a prior evaluation or assessment is used.
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			Bypass Line = The closed vent system contains no bypass line.
900-D78.01	40 CFR Part 63, Subpart G	63G-02	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.
			Control Device = Flare
			Overlap = Title 40 CFR Part 60, Subpart NNN
			Group 1 = The process vent meets the definition of a Group 1 process vent.
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.
			Halogenated = Vent stream is not halogenated.
			By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.
			Performance Test = No previous performance test was conducted.
GRP-POLY1	30 TAC Chapter 115, Vent Gas	R5121-01	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
	Controls		Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
GRP-POLY1	40 CFR Part 63,	634F-GRPPLY1-	Designated Grp1 = The emission stream is designated as Group 1.

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart FFFF	01	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i.
			Hal Device Type = No halogen scrubber or other halogen reduction device is used.
			Meets $63.988(b)(2)$ = The control device meets criteria in § $63.985(b)(2)$.
			Small Device = A small control device (defined in § 63.2550) is not being used.
			1257A1 = No design evaluation as specified in § 63.1257(a)(1) is being conducted.
			Designated Hal = The emission stream is not designated as halogenated.
			Prior Eval = The data from a prior evaluation or assessment is used.
			Determined Hal = The emission stream is determined to be non-halogenated.
			Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested.
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			Bypass Line = The closed vent system contains no bypass line.
			CEMS = A CEMS is not used.
			SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel.
GRP-POLY1	40 CFR Part 63,	634F-GRPPLY1-	Designated Grp1 = The emission stream is designated as Group 1.
	Subpart FFFF	02	Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control.
			Designated Hal = The emission stream is not designated as halogenated.
			Determined Hal = The emission stream is determined to be non-halogenated.
			Prior Eval = The data from a prior evaluation or assessment is used.
			Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure.
			Bypass Line = The closed vent system contains no bypass line.
GRP-PVOH1	30 TAC Chapter	R5121-01	Alternate Control Requirement = Alternate control is not used.
	115, Vent Gas Controls		Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
GRP-PVOH2	30 TAC Chapter 115, Vent Gas	R5121-01	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
	Controls		Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).

Unit ID	Regulation	Index Number	Basis of Determination*
			VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
PRO-AAR	40 CFR Part 63, Subpart F	63F-01	Applicable Chemicals = THE CHEMICAL MANUFACTURING PROCESS UNIT MANUFACTURES, AS A PRIMARY PRODUCT, ONE OR MORE OF THE CHEMICALS LISTED IN 40 CFR § 63.100(B)(1)(I) OR 40 CFR § 63.100(B)(1)(II)
			Intervening Cooling Fluid = THERE IS NOT AN INTERVENING COOLING FLUID (CONTAINING LESS THAN 5 PERCENT BY WEIGHT OF TOTAL HAPS LISTED IN TABLE 4 OF 40 CFR PART 63, SUBPART F) BETWEEN THE PROCESS AND COOLING WATER
			Table 2 HAP = THE CHEMICAL MANUFACTURING PROCESS UNIT USES AS A REACTANT OR MANUFACTURES, AS A PRODUCT OR CO-PRODUCT, ONE OR MORE OF THE ORGANIC HAZARDOUS AIR POLLUTANTS (HAPS) IN TABLE 2
			Table 4 HAP Content = A RECIRCULATING HEAT EXCHANGE SYSTEM IS NOT USED TO COOL PROCESS FLUIDS THAT CONTAIN LESS THAN 5 PERCENT BY WEIGHT OF TOTAL HAPS LISTED IN TABLE 4 OF TITLE 40 CFR PART 63, SUBPART F
			Alternate Means of Emission Limitation = AN ALTERNATIVE MEANS OF EMISSION LIMITATION IS NOT USED TO ACHIEVE A REDUCTION IN ORGANIC HAP EMISSION
			NPDES Permit = HEAT EXCHANGE SYSTEM IS NOT SUBJECT TO A NPDES PERMIT WITH ALLOWABLE DISCHARGE LIMIT
			Meets 40 CFR 63.104(a)(4)(i)-(iv) = HEAT EXCHANGER NOT REQUIRED TO MEET THIS CITATION
			Heat Exchange System = A HEAT EXCHANGE SYSTEM IS USED
			Table 9 HAP Content = ONCE-THROUGH HEAT EXCHANGE SYSTEM IS NOT USED TO COOL PROCESS FLUIDS THAT CONTAIN LESS THAN 5 PERCENT BY WEIGHT OF TOTAL HAPS LISTED IN TABLE 9 OF 40 CFR PART 63, SUBPART G
			Cooling Water Monitored = COOLING WATER IS BEING MONITORED FOR THE PRESENCE OF ONE OR MORE HAPS OR OTHER REPRESENTATIVE SUBSTANCES WHOSE PRESENCE IN COOLING WATER INDICATES A LEAK
			Cooling Water Pressure = THE HEAT EXCHANGE SYSTEM IS NOT OPERATED WITH THE MINIMUM PRESSURE ON THE COOLING WATER SIDE AT LEAST 35 KILOPASCALS GREATER THAN THE MAXIMUM PRESSURE ON THE PROCESS SIDE

^{* -} The "unit attributes" or operating conditions that determine what requirements apply

NSR versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification	For initial permit with application shield, can be issued
of an existing facility	after operation commences; significant revisions require
	approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not
	authorize new emissions
Ensures issued permits are protective of the	Applicable requirements listed in permit are used by the
environment and human health by conducting a	inspectors to ensure proper operation of the site as
health effects review and that requirement for	authorized. Ensures that adequate monitoring is in
best available control technology (BACT) is	place to allow compliance determination with the FOP.
implemented.	
Up to two Public notices may be required.	One public notice required. Opportunity for public
Opportunity for public comment and contested	comments. No contested case hearings.
case hearings for some authorizations.	
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources
	identified by the EPA.
Applies to facilities: a portion of site or individual	One or multiple FOPs cover the entire site (consists of
emission sources	multiple facilities)
Permits include terms and conditions under	Permits include terms and conditions that specify the
which the applicant must construct and operate	general operational requirements of the site; and also
its various equipment and processes on a facility	include codification of all applicable requirements for
basis.	emission units at the site.
Opportunity for EPA review for Federal	Opportunity for EPA review, Affected states review, and
Prevention of Significant Deterioration (PSD)	a Public petition period for every FOP.
and Nonattainment (NA) permits for major	
sources.	
Permits have a table listing maximum emission	Permit has an applicable requirements table and
limits for pollutants	Periodic Monitoring (PM) / Compliance Assurance
	Monitoring (CAM) tables which document applicable
	monitoring requirements.
Permits can be altered or amended upon	Permits can be revised through several revision
application by company. Permits must be issued	processes, which provide for different levels of public
before construction or modification of facilities	notice and opportunity to comment. Changes that would
can begin.	be significant revisions require that a revised permit be
100	issued before those changes can be operated.
NSR permits are issued independent of FOP	FOP are independent of NSR permits, but contain a list
requirements.	of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The

Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Title 30 TAC Chapter 116 Permits, Spe Permits By Rule, PSD Permits, or NA	ecial Permits, and Other Authorizations (Other Than Permits) for the Application Area.
Authorization No.: 19618	Issuance Date: 09/20/2011
Permits By Rule (30 TAC Chapter 106) for the Application Area
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.372	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.475	Version No./Date: 03/14/1997
Number: 106.475	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: 900-MEAC	
Control Device ID No.: 800-B15.50	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: R5212-01
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	

Deviation Limit: Monitor and record the periods of operation of the boiler. All periods when the boiler is operating as a control device that are not recorded shall be considered and reported as a deviation.

Basis of monitoring:

A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.

Unit/Group/Process Information	
ID No.: 900-MEOH	
Control Device ID No.: 800-B15.50	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Loading and Unloading of VOC	SOP Index No.: R5212-01
Pollutant: VOC	Main Standard: § 115.212(a)(1)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	

Deviation Limit: Monitor and record the periods of operation of the boiler. All periods when the boiler is operating as a control device that are not recorded shall be considered and reported as a deviation.

Basis of monitoring:

Averaging Period: n/a

A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

- the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate 1. thereof) in an applicable requirement;
- the emission unit uses a control device to achieve compliance with the emission limitation or standard 2. specified in the applicable requirement; and
- the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons 3. per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: 900-D78.01	
Control Device ID No.: 800-B15.50	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Monitor and record the periods of	f operation of the boiler. All periods when the boiler is

operating as a control device that are not recorded shall be considered and reported as a deviation.

Basis of CAM: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.

Unit/Group/Process Information ID No.: 900-D78.01 Control Device ID No.: 900-FLARE Control Device Type: Flare Applicable Regulatory Requirement Name: 30 TAC Chapter 115, Vent Gas Controls SOP Index No.: R5121-02 Pollutant: VOC Main Standard: § 115.121(a)(2) Monitoring Information Indicator: Pilot Flame Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: Any absence of a flare pilot flame when not routed to the primary control device (boiler) shall be reported as a deviation.

Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.

Unit/Group/Process Information		
ID No.: GRP-PTKS		
Control Device ID No.: 800-B15.50	Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW)	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-01	
Pollutant: VOC	Main Standard: § 115.112(e)(1)	
Monitoring Information		
Indicator: Period of Operation		
Minimum Frequency: n/a		
Averaging Period: n/a		
Deviation Limit: Monitor and record the periods of operation of the boiler. All periods when the boiler is operating as a control device that are not recorded shall be considered and reported as a deviation.		

Basis of CAM: A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40

CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.

Unit/Group/Process Information ID No.: GRP-PTKS Control Device ID No.: 900-FLARE Control Device Type: Flare Applicable Regulatory Requirement Name: 30 TAC Chapter 115, Storage of VOCs SOP Index No.: R5112-02 Pollutant: VOC Main Standard: § 115.112(e)(1) Monitoring Information Indicator: Pilot Flame Minimum Frequency: Continuous

Averaging Period: n/a

Deviation Limit: Any absence of a flare pilot flame when not routed to the primary control device (boiler) shall be reported as a deviation.

Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.

Compliance Review	
1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on <u>06/23/2014</u> .	
2. The compliance history review evaluated the period from <u>12/02/2008</u> to <u>12/02/2013</u> .	
Site rating: <u>0.00</u> Company rating: <u>0.00</u>	
(High < 0.10; Satisfactory > 0.10 and < 55; Unsatisfactory > 55)	
3. Has the permit changed on the basis of the compliance history or site/company rating?	No
Site/Permit Area Compliance Status Review	
1. Were there any out-of-compliance units listed on Form OP-ACPS?	N
2. Is a compliance plan and schedule included in the permit?	No
Available Unit Attribute Forms	
OP-UA1 - Miscellaneous and Generic Unit Attributes	
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes	
OP-UA3 - Storage Tank/Vessel Attributes	
OP-UA4 - Loading/Unloading Operations Attributes	
OP-UA5 - Process Heater/Furnace Attributes	
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes	
OP-UA7 - Flare Attributes	
OP-UA8 - Coal Preparation Plant Attributes	
OP-UA9 - Nonmetallic Mineral Process Plant Attributes	
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes	
OP-UA11 - Stationary Turbine Attributes	
OP-UA12 - Fugitive Emission Unit Attributes	
OP-UA13 - Industrial Process Cooling Tower Attributes	
OP-UA14 - Water Separator Attributes	
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes	
OP-UA16 - Solvent Degreasing Machine Attributes	
OP-UA17 - Distillation Unit Attributes	
OP-UA18 - Surface Coating Operations Attributes	
OP-UA19 - Wastewater Unit Attributes	
OP-UA20 - Asphalt Operations Attributes	
OP-UA21 - Grain Elevator Attributes	
OP-UA22 - Printing Attributes	
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes	
OP-UA25 - Synthetic Fiber Production Attributes	
OP-UA26 - Electroplating and Anodizing Unit Attributes	
OP-UA27 - Nitric Acid Manufacturing Attributes	
OP-UA28 - Polymer Manufacturing Attributes	
OP-UA29 - Glass Manufacturing Unit Attributes	
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes	
OP-UA31 - Lead Smelting Attributes	
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes	
OP-UA33 - Metallic Mineral Processing Plant Attributes	
OP-UA34 - Pharmaceutical Manufacturing	
OP-UA35 - Incinerator Attributes	
OP-UA36 - Steel Plant Unit Attributes	
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes	
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes	
OP-UA39 - Sterilization Source Attributes	
OP-UA40 - Ferroalloy Production Facility Attributes	

- OP-UA41 Dry Cleaning Facility Attributes
- OP-UA42 Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 Sulfuric Acid Production Attributes
- OP-UA44 Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes
- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- OP-UA58 Treatment Process Attributes
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes